

STUDIES IN THE EUPATORIEAE (ASTERACEAE) LXXVI.

ADDITIONS TO THE GENUS KYRSTENIOPSIS

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When the genus Kyrsteniopsis was originally described (King & Robinson, 1971) some variation was noted in the material but we had too few specimens to allow proper evaluation. The arrival of a new collection from Mexico and the loans kindly provided by the University of Michigan, the University of Texas, and the Gray Herbarium, show certain features to be consistent. On this basis we expand the genus to include four species, two species described as new in this paper, and one species previously placed in the genus Brickellia.

Key to species of Kyrsteniopsis

- 1a. Achenes with few or no glands, with ca. 25-30 pappus setae 2
- 1b. Achenes with numerous prominent glands, with ca. 35-45 pappus setae. 3
- 2a. Inflorescence very dense with short lateral branches; carpodium sclerotized throughout K. congesta
- 2b. Inflorescence rather lax with elongate lateral branches, carpodium sclerotized only in lower part K. nelsonii
- 3a. Herbaceous 3-4 dm tall; branches of the inflorescence with 3-5 long-pedicellate heads; anther collars sclerotized throughout K. cymulifera
- 3b. Shrub ca. 1 m tall; branches of the inflorescence with many densely clustered heads; anther collars with median unsclerotized portion K. dibollii

Kyrsteniopsis congesta R.M.King & H.Robinson, sp. nov.  
Plantae subarborescentes usque ad 3 m altae. Caules

teretes atrorubrescentes albo-puberuli. Folia opposita longe petiolata, petiolis 2-6 cm longis; lamina ovato-lanceolata usque ad 12 cm longa et 6.5 cm lata, anguste acuminata basi late cordata valde trinervata margine denticulata in dimidio superiore integra, subtus glandulifera in nervis et nervulis breviter tomentosa. Inflorescentiae thyrsiformes anguste ovoideae, pedicellis brevibus dense tomentosis. Capitula congesta subglomerata, ca. 6 mm alta; flores 9-12 in capitulo; involucri squamae ca. 25 subimbricatae valde inaequilongae tri-quadriseiatae anguste oblongae obtusae extus glabrae; receptacula convexa glabra; corollae anguste tubulares ca. 3.5 mm longae extus in lobis et in dimidio inferiore glanduliferae; filamenta antherarum in parte superiore ubique indurata; achaenia in costis dense setifera non glandulifera; carpodia cylindrica ubique indurata, cellulis parvis multiseriatis rotundatis collenchymatosis; pappi setae ca. 23-27. Grana pollinis 18-20 $\mu$  diam.

MEXICO: Guerrero: 2 km al S de Taxco, sobre la carretera a Iguala. Arbusto de 3 m. de alto; ramas del estilo amarillentas. February 14, 1970. 1800 m J. Rzedowski 27070 (Holotype US! Isotype MICH!).

The species is most distinct in the compact form of the inflorescence. The carpodium and outer wall of the achene are also unique in the genus by being sclerotized throughout.

Kyrsteniopsis cymulifera (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Brickellia cymulifera B.L. Robinson, Proc. Amer. Acad. 51: 538. 1916. MEXICO: San Luis Potosi: C.A.Purpus 4802 (Isotype US!)

Kyrsteniopsis dibollii R.M.King & H.Robinson, sp. nov. Plantae frutescentes ca. 1 m altae. Caules teretes fuscii breviter puberuli. Folia opposita tenuiter petiolata, petiolis usque ad 2 cm longis vel longioribus; lamina late ovata breviter acuminata usque ad 5.5 cm longa et 4 cm lata basi truncata vel cordata trinervata margine subintegra, subtus glandulifera in nervis et nervulis breviter tomentosa. Inflorescentiae paniculatae, ramulis brevibus corymbosis, pedicellis 1-4 mm longis puberulis. Capitula ca. 6 mm alta; flores ca. 13 in capitulo; involucri squamae ca. 25 imbricatae valde inaequilongae tri-quadriseiatae oblongae obtusae extus glabrae; receptacula convexa glabra; corollae anguste tubulares 4.0-4.5 mm longae extus in lobis et in dimidio inferiore glanduliferae; filamenta antherarum in parte superiore interrupta; achaenia

setifera et glandulifera; carpopodia solum in parte inferiore rotundata indurata, cellulis parvis multi-seriatis rotundatis valde collenchymatosis; pappi setae ca. 35. Grana pollinis 18-20 $\mu$  diam.

MEXICO: Veracruz: Along route 150, ca. 20 miles north of Tehuacan. Occasional; a shrub about 1 meter tall; open sun; flowers yellow? January 26, 1960. Robert Merrill King 2329 (Holotype MICH! Isotype US!).

The new species is like K. cymulifera (B.L.Robinson) R.M.King & H.Robinson in the numerous glands on the achene and in the greater number of pappus setae. Differences from K. cymulifera include the much more robust habit and the partially unsclerotized anther collars.

The new species is named for Dr. Alfred George Diboll whose aid and enthusiasm during the 1960 collecting season was greatly appreciated by the senior author.

Kyrsteniopsis nelsonii (B.L.Robinson) R.M.King & H. Robinson, Phytologia 22:146. 1971. MEXICO: Guerrero: E.W.Nelson 2144 (Lectotype US! Isolectotype GH!); Michoacan: McVaugh 22,651 (MICH!); Anderson & Anderson 5889 (MICH!); Oaxaca: Seler 1447 (GH!).

#### Reference

King, R.M. & H.Robinson 1971. Studies in the Eupatorieae (Asteraceae). LXIII. A new genus, Kyrsteniopsis. Phytologia 22: 145-146.

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